Index of Claims

| Application/Control No. | A | pp | ΙÌ | Cá | ati | 0 | n | C | on | tro | ١ | N | o. |
|-------------------------|---|----|----|----|-----|---|---|---|----|-----|---|---|----|
|-------------------------|---|----|----|----|-----|---|---|---|----|-----|---|---|----|

10/679,746 Examiner Applicant(s)/Patent under Reexamination

YAKUBU-MADUS ET AL.

Art Unit

Gyan Chandra

1646

√ Rejected
= Allowed

|   | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N        | Non-Elected  |
|----------|--------------|
| <u> </u> | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

|              |                  | 1  |              | _            |              | D                  |              |                    |         | _         |          |          |               |           |          | _        | -1-  |          |   |          | <b>1</b> | <u> </u> | -1         |                    |  |  |  | 1-4-     |          |                 |             |   |
|--------------|------------------|--|--------------|--------------|--------------|--------------------|--------------|--------------------|---------|-----------|----------|----------|---------------|-----------|----------|----------|--|----------|---|----------|----------|----------|------------|--------------------|--|--|--|----------|----------|-----------------|-------------|---|
| Cla          | aim              | Ļ  | 7            | _            | _            | Da                 | ie<br>T      | -                  | _       |           | Cla      | aim      | <u> </u>      |           | ı        | Ų        | ate  | _        | _   |          |          | U        | aim        |                    | _  |  | -  | ate      | ;        | - 1             | <del></del> |   |
| Final        | Original         | 0  | 7            |              |              |                    |              |                    |         |           | Final    | Original |               |           |          | ;        | ì  |          |   |          |          | Final    | Original   |                    |  |  |  |          |          |                 |             |   |
|              | 1                | -  | +            | ╁            | -            | +-                 | +            | ┿                  | ╁       | $\vdash$  |          | 51       |               | -         | -+       | $\dashv$ | $\dashv$   | +        | 十   | +-       | 1        |          | 101        | _                  |  | _  |  | $\dashv$ |          | $\dashv$        | $\dashv$    |   |
|              | 1                | -  | +            | 十            | H            | 1                  | +            | ╁╴                 | +       | $\vdash$  | -        | 52       | $\vdash$      | -         | 十        | +        | +  | ╅        | +   |          |          |          | 102        |                    |  | _  |  |          |          | -+              | $\dashv$    |   |
|              | В                | ╁╴   | ╁            | +            | ┢            | +                  | ╁            | +                  | +       | $\vdash$  |          | 53       |               | $\dashv$  | $\dashv$ | 十        | 十  | - -      | +   | - -      |          |          | 103        |                    | _  |  |  |          |          | -               | $\dashv$    |   |
| -            | 1                | <u> </u>   | +            | $\vdash$     | ┢            | +                  | +            | +                  | +       | Н         |          | 54       |               |           | +        | 十        | +  | 十        | Ť   | +        | 1        |          | 104        | -                  |  |  |  |          |          | $\dashv$        | $\dashv$    |   |
|              | 5                | <u> </u>   | +-           | -            | <u> </u>     | +                  | 1            | +                  | $\top$  | П         |          | 55       |               | 一         | 十        | 十        | +  | _        | +   | $\neg$   | 1        |          | 105        | Τ.                 | $\vdash$   |  |  |          |          | 7               | $\dashv$    |   |
|              | B                | <del>                                     </del> | $\top$       | t            | T            |                    | $\top$       | +                  | 1       | H         |          | 56       | $\Box$        | $\neg$    | $\dashv$ | 十        | 十  | _        | $\top$  | _        | 1        |          | 106        |                    |  |  |  |          |          | $\dashv$        | $\neg$      |   |
|              | 7                |  | $\top$       | 1            |              | 1                  | T            | Ť                  |         | $\Box$    |          | 57       | П             | コ         | 寸        | 寸        | $\dashv$   | $\top$   | $\top$  |          | 1        |          | 107        |                    |  |  |  |          |          | $\neg$          | $\neg$      |   |
|              | 8                | Γ  | Τ            | $\top$       | T            |                    | 1            |                    |         |           |          | 58       |               |           |          |          |  |          | T   | T T      | 1        |          | 108        |                    |  |  |  |          |          |                 | $\Box$      | _ |
|              | 9                |  |              | Π            |              | T                  | 1            |                    |         |           |          | 59       |               |           |          |          |  |          |   |          | ]        |          | 109        |                    |  |  |  |          |          |                 |             |   |
|              | 10               |  |              |              | $\Box$       |                    | $oxed{\Box}$ | $oxed{oxed}$       |         |           |          | 60       |               |           |          |          | $\Box$   |          | $oxed{oxed}$  |          | ]        |          | 110        |                    |  |  |  |          |          | $\Box$          | $\Box$      |   |
|              | 11               |  |              |              | Ĺ            |                    |              |                    |         |           |          | 61       |               |           | $\Box$   | $\Box$   | $\perp \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$ |          | $oldsymbol{ol}}}}}}}}}}}}}}}$ |          | ļ        |          | 111        | L                  |  |  |  |          |          |                 | $\Box$      |   |
|              | 12               |  |              |              | Ĺ            |                    |              |                    |         | $\Box$    |          | 62       |               |           |          |          |  |          |   |          | ļ        |          | 112        | $oxedsymbol{oxed}$ |  |  |  |          |          | _               | ᆜ           |   |
|              | 13               | L  | 1            |              |              | 1                  | 1_           | 1                  | $\perp$ | Щ         |          | 63       | Ш             | $\Box$    | _        | $\perp$  | _  | $\perp$  | $\perp$   | $\perp$  | 1        | L        | 113        |                    |  |  | Ш  |          |          | _ļ              | _           |   |
|              | 14               | L  | 1            | <del> </del> | $\perp$      | $\perp$            | 丄            | $\bot$             | $\perp$ | Ш         |          | 64       | Ш             |           | $\dashv$ | _        | _  | $\perp$  | 1   |          | 1        |          | 114        |                    |  |  | Ш  |          | _        | _               | _           |   |
|              | 15               | L  | ╄            | _            | ļ.           | $\perp$            | ┸            | $\bot$             | _       | Ш         |          | 65       | Ш             | _         | $\perp$  | 4        | _  | _        | 4   |          | 1        | <u> </u> | 115        | _                  |  |  |  |          |          |                 |             |   |
| <u> </u>     | 16               | ┡  | 1            | -            | 1-           | 4-                 | +            | +                  | +       | $\sqcup$  | <u> </u> | 66       | $\mid - \mid$ |           | $\dashv$ | $\dashv$ | -  | _        | 4   |          | 1        | <u> </u> | 116        | <u> </u>           | -  | <u> </u>   | Н  |          |          | $\dashv$        | $\dashv$    |   |
|              | 17               | ╀  |              | $\vdash$     | ⊢            | +                  | +            | +                  | +       | $\vdash$  |          | 67       | Н             | _         | _}       | +        | -  | -        | +   | +        | 1        | <u> </u> | 117<br>118 | <u> </u>           | <del> </del>                                     | <u> </u>   | H  |          | $\vdash$ |                 |             |   |
|              | 1 <u>B</u>       | ┡  | <del> </del> | $\vdash$     | ⊢            | -                  | +            | +                  | ╁       | Ш         | -        | 68       | Н             | _         | _        | +        | -  | +        | +   | +        | ┨        | ├        |            |                    | -  | -  |  | =        | $\vdash$ | $\dashv$        |             |   |
|              | 19               | ┝  | +-           | +            | ┝            | +-                 | +-           | ╀                  | +-      | Н         | -        | · 69     | Н             | $\dashv$  | -        | -+       | +  | +        | ╫   |          | ł        | -        | 119<br>120 |                    |  |  |  | -        | $\vdash$ | -               | $\dashv$    |   |
|              | 20               | ╀  | +-           | ╀            | ╀            | +                  | ╁╌           | +-                 | ╫       | H         | -        | 71       | Н             |           |          |          | $\dashv$   | +        | ╬   |          | 1        |          | 121        | -                  | -  |  | _  |          | Н        | $\dashv$        | $\dashv$    |   |
| <u> </u>     | 2 <u>1</u><br>22 | ╀  | +            | ╀            | ╀            | +                  | +            | +-                 | +       | H         | -        | 72       | Н             |           | +        | -+       | +  | +        | ┿   |          | ┨        |          | 122        | ├─                 | $\vdash$   | -  | -  | -        | Н        | -               | $\dashv$    | _ |
| <u> </u>     | 23               | <del> </del>                                     | +            | ╁            | ╀            | +                  | ╁            | +                  | ╫       | H         | -        | 73       | $\vdash$      | -         | +        | +        | +  |          | +   |          | ┨        | $\vdash$ | 123        | <del> </del>       | $\vdash$   | -  |  |          | Н        | $\dashv$        | $\dashv$    |   |
| $\vdash$     | 24               | 1  | +-           | ┢            | ╁            | +                  | +            | ╁                  | ╫       | $\vdash$  | -        | 74       | -             | -         | $\dashv$ | $\dashv$ | $\dashv$   | -        | +   |          | ┨        | $\vdash$ | 124        | -                  | -  | -  | $\vdash$   |          |          | $\dashv$        | $\dashv$    |   |
| <del> </del> | 25               | H  | ╁╌           | +-           | ╁            | +                  | +            | +                  | +       | +         | <b>—</b> | 75       | Н             | -         | $\dashv$ | 十        | $\dashv$   | +        | +   |          | 1        | <u> </u> | 125        | _                  | -  | <del>                                     </del> |  |          |          | $\neg$          | 一           |   |
| <del> </del> | 26               | H  | ╁╴           | +            | ╁            | ╁                  | +-           | +                  | +       | Н         |          | 76       | Н             | $\dashv$  | 十        | $\dashv$ | $\dashv$   | +        | +   | $\dashv$ | 1        |          | 126        | -                  | $\vdash$   | <u> </u>   |  |          |          | $\dashv$        | 寸           |   |
|              | 27               | Ħ  | +            | +            | t            | +                  | +            | +                  | ╅       | Н         | ļ        | 77       | Н             | $\exists$ | 寸        | 十        | 7  | $\top$   | 十   | $\top$   | 1        |          | 127        |                    |  | -  |  |          |          | T               | ヿ           |   |
|              | 28               | Ħ  | T            | +-           | ╁╌           | ╁                  | +            | +                  | +-      | $\vdash$  | <u> </u> | 78       | П             | 一         | +        | 寸        | 1  | T        | T   |          | 1        | $\vdash$ | 128        |                    |  |  |  |          |          |                 | 一           | _ |
|              | 29               | #  | +            | T            | t            | +                  | T            | $^{+}$             | +       |           |          | 79       |               | $\neg$    | $\neg$   | $\neg$   | 十  | $\top$   | $\top$  | 1        | 1        |          | 129        |                    |  |  |  |          |          |                 | $\neg$      |   |
|              | 30               | $\dagger$  | 1            | 1            | T            | T                  | T            | 1                  | $\top$  | П         |          | 80       |               |           | $\neg$   | $\neg$   | $\neg$   |          | 7   |          | 1        |          | 130        |                    |  |  |  |          |          |                 | $\Box$      |   |
|              | 31               | 15   | $\top$       | 1            | T            | $\top$             | $\top$       | T                  | $\top$  | П         |          | 81       |               |           | $\neg$   | $\neg$   | $\neg$   | $\top$   | T   |          | 1        |          | 131        |                    | Г  |  |  |          |          |                 |             |   |
|              | 32               | IT   | T            |              | Τ            |                    |              | Ι                  |         |           |          | 82       |               |           |          |          | I  |          | Τ   |          | ]        |          | 132        |                    |  |  |  |          |          |                 |             |   |
|              | 33               | $\prod$  |              |              |              | $oxed{\mathbb{T}}$ | Γ            | $oxed{\mathbb{T}}$ | oxdot   |           |          | 83       |               |           | $\Box$   | I        | $\Box$   | $\Box$   | $\perp$   |          |          |          | 133        |                    |  | L  |  |          | Щ        |                 | $\Box$      |   |
|              | 34               | П  |              | L            |              | $\perp$            | $oxed{\Box}$ |                    |         | Ш         |          | 84       |               |           | _[       | _[       | _  | $\perp$  | $\perp$   |          | 1        |          | 134        | <u> </u>           | _  |  | _  | _        | Щ        |                 | $\dashv$    | _ |
| L            | 35               | 11   | 1            | 1            | L            | 4                  | $\bot$       | $\perp$            | ļ.,     |           | <u> </u> | 85       | L.            |           | 4        | 4        | $\dashv$   | $\perp$  | 4   | _ _      | 1        | <u></u>  | 135        | _                  | 1  | _  | <u> </u>   | _        |          | $\sqcup$        | _           |   |
|              | 36               | Ц  | 1_           | 1            | L            | 4                  | 1            | 1                  | $\perp$ | $\sqcup$  |          | 86       |               |           | _        | _        | _  | _        | 4   | _ _      | 1        |          | 136        | <u> </u>           | ₩  | _  | <u> </u>   | _        |          |                 | _           |   |
|              | 37               | 11   | $\bot$       | ↓_           | $\downarrow$ | 4                  | 4-           | 4-                 | 4       | $\square$ |          | 87       | $\vdash$      |           | _        | _        | $\dashv$   | $\perp$  | 4   | -        | -        |          | 137        | <u> </u>           |  | -  | $\vdash$   | $\vdash$ | $\vdash$ |                 |             |   |
| <u> </u>     | 38               | 11   | $\bot$       |              | $\perp$      | $\bot$             | $\bot$       | $\bot$             | +       | $\sqcup$  | <u> </u> | 88       | <u> </u>      | $\sqcup$  | _        | +        | $\dashv$   | +        | $\bot$  | +-       | 1        | <u></u>  | 138        | $\vdash$           | <u> </u>   | <u> </u>   | $\vdash$   | <u> </u> | _        | $\dashv$        |             | _ |
| <u> </u>     | 39               | #  | +            | $\bot$       | $\perp$      | 4                  | 4            | _                  | 4-      | $\sqcup$  |          | 89       | <u> </u>      | $\square$ | 4        | -        |  | -        | +   |          | -        | <u></u>  | 139        | -                  | <del>  -</del>                                   | ⊢  | -  | <u> </u> | -        | $\vdash$        | _           |   |
|              | 40               | H  | +-           | +            | -            | +                  | +            | +                  | +       |           | -        | 90       | $\vdash$      | $\vdash$  | $\dashv$ | $\dashv$ | -  |          | +   |          | 1        |          | 140<br>141 | -                  | ├  | $\vdash$   |  | -        |          | $\vdash \vdash$ | $\dashv$    |   |
| <u> </u>     | 41               | ₩  | +-           | +            | +            | +                  | +            | +                  |         | 1-1       | $\vdash$ | 91       | $\vdash$      | $\vdash$  | $\dashv$ | $\dashv$ | +  | +        | +   | -        | 1        | -        | 141        | $\vdash$           | ⊢  | -  | -  | -        | -        | $\vdash$        | $\dashv$    |   |
|              | 42               | H  | +            | +            | ╀            | ╁                  | +            | +                  | +       | +-        | -        | 92<br>93 | -             | $\vdash$  | -+       | +        | $\dashv$   | +        | +   | -        | 1        | -        | 143        |                    | -  | -  | -  | _        |          | $\vdash$        | $\dashv$    | _ |
| -            | 43<br>44         | $\mathbb{H}$                                     | +            | ╁            | ╁            | +-                 | +            | +                  | +       | +         | -        | 94       | -             | Н         | $\dashv$ | $\dashv$ | +  | +        | +   | +        | ┨        | -        | 144        | $\vdash$           | $\vdash$   | -  | -  | $\vdash$ | $\vdash$ | $\vdash$        | $\dashv$    | - |
| <b></b>      | 45               | H  | +            | +            | ╁            | +-                 | +            | +-                 | +       | +         | -        | 95       | ╁             | $\vdash$  | $\dashv$ | $\dashv$ | +  | +        | +   | $\dashv$ | 1        |          | 145        | -                  | <del>                                     </del> | +-   | $\vdash$   |          | ┢        | $\vdash \vdash$ |             | - |
|              | 46               | +  | -            | +            | ╁            | +                  | +            | +-                 | +       | +         | -        | 96       | $\vdash$      | $\vdash$  | $\dashv$ | -+       | -+   | $\dashv$ | +   | +        | 1        | $\vdash$ | 146        | $\vdash$           | 1  | t-   | -  |          | $\vdash$ | H               | $\neg$      | _ |
|              | 47               | l  |              | ╁            | ╁            | +                  | ╁            | +                  | +-      | +-        |          | 97       | $\vdash$      | Н         | $\dashv$ | +        | $\dashv$   | $\dashv$ | +   | $\dashv$ | 1        | -        | 147        | 1                  | +-   | <del>                                     </del> | <del>                                     </del> | $\vdash$ |          | $\vdash$        | -           |   |
| <u> </u>     | 48               | ╁┸   | ╁            | ╁            | 十            | +                  | 十            | +                  | +       | +         | -        | 98       | †             | H         | $\dashv$ | $\dashv$ | $\dashv$   | +        | $\dagger$   | - -      | 1        |          | 148        | $\vdash$           | $\vdash$   | 1  | $\vdash$   | $\vdash$ |          | H               | $\Box$      |   |
| -            | 49               | ✝  | +-           | +-           | +            | +                  | +            | +                  | +       | H         |          | 99       | <u> </u>      | Н         | -        | -        | $\dashv$   | $\dashv$ | +   | $\dashv$ | 1        |          | 149        | 1                  |  | $\vdash$   | Τ  | $\vdash$ | Г        | $\Box$          | $\neg$      | _ |
| <u> </u>     | 50               | 十  | +            | +            | t            | +                  | +            | 十                  | +       | +-1       |          | 100      | T             | Н         | _        | -        | $\dashv$   | $\dashv$ | 7   | $\neg$   | 1        |          | 150        | Т                  | $\vdash$   | t  | Г  |          | Г        | П               | $\sqcap$    |   |
| Щ.           | 1 50             |  |              |              | _            |                    |              |                    |         | لل        |          |          | ч             | لـــا     |          |          |  |          |   |          | j        |          |            | ٠.                 | _  |  |  |          |          |                 |             | _ |